The ASME AMRGT organizing team is pleased to present the following list of technical presentations for the 2020 event. These selected technical presentations will be presented in two parallel sessions on Wednesday, March 4th.

**Advanced Manufacturing Track Room 741E**

**Session 1 Advanced Manufacturing Techniques and Methods**

**Session Chairs:** John Shingledecker and Rob Steele, EPRI
- Utilizing Big Data Techniques to Design Materials for Additive Manufacturing; Jonathon Bracci, Oerlikon Metco
- Combustion Components are Particularly Suitable for Harvesting the Benefits of Additive Manufacturing; Gianni Panfili, Siemens
- Rapid Prototype of Turbine Component with Additive Manufacturing; Greg Balow, Solar Turbines Inc.

**Session 2 Advanced Manufacturing Design Applications**

**Session Chairs:** Justin Cheney, Oerlikon; Rob Steele, EPRI
- Capabilities of Selective Laser Melting Additive Manufacturing and Repair from Powder to Production; January Smith, Southwest Research Institute
- Additive Manufacturing of Auxiliary Dilution Air Tube for Tangentially Stabilized Combustor Liner; German Verduzco, Solar Turbines

**Session 3 Adv. Manufacturing Impact on Inspection & Testing**

**Session Chairs:** Doug Straub, DOE; Rob Steele, EPRI
- Effusion Hole Drilling and Impact on Coating Life in Advanced Combustion, Ke Huang, Siemens Energy
- Development of Automated Metallographic Inspection and Process Control Software for Additively Manufactured Industrial Gas Turbine Engine Components, Tyler Boveington, Solar Turbines (Caterpillar)
- Evaluation of a Nickel Base Superalloy Additively Manufactured and Testing in Gas Turbine Engine Trials, Alex Bridges, Electric Power Research Institute

**Advanced Repair Track Room 741B**

**Session 1 Adv. Repair Process Dev., Control & Management**

**Session Chairs:** Justin Kuipers, Liburdi; Jeff Chapin, Liburdi
- Step-Wise Validation of Directed Energy Deposition Blade Repair Processes Prior to Fatigue Assessment; Onome Scott-Emuakpor, AFRL
- Successfully Qualified Additive Repair Processes for Gas Turbine Hot Gas Path Components; Dheepa Srinivasan, Pratt & Whitney R & D Center

**Session 2 Advanced Repair Limits, Inspections and Applications**

**Session Chairs:** Dheepa Srinivasan, P&W; Andrew Goldin, AFRL & AFIT
- Coating Thickness Measurement of Internal Surfaces with Laser Scanning Technology; Anand Kulkarni, Siemens
- Early Experience Applying Process Compensated Resonance Testing to Assess New and Repaired Turbine Blade Quality; John Scheibel, Electric Power Research Institute

**Session 3 Advanced Repair Implementation, Service Evaluation and Process Control**

**Session Chairs:** Daniel Purdy, EPRI
- Rim Replacement for Cracked Large Land Based Compressor Wheels, Daniel Purdy, EPRI
- Case Study: Metallurgical Analysis of Previously Repaired GE Frame 7FA Stage 1 Turbine Buckets, Justin Kuipers, Liburdi Turbine Services